# **Tree Lifecycle**

## Project Learning Tree Activity #79

### **Program of Studies**

#### Science:

- S-P-SI-1(ask simple scientific questions that can be answered through observations.)
- S-P-SI-3 (use evidence (e.g., observations) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-P-SI-4 (Students will design and conduct different kinds of simple scientific investigations.)
- S-P-SI-5 (communicate (e.g., speak, draw) designs, procedures, and results of scientific investigations.)
- S-P-SI-6 (question scientific investigations and explanations of other students.)
- S-P-LS-1(Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-4-SI-1 (ask simple scientific questions that can be answered through observations combined with scientific information)
- S-4-SI-3 (use evidence (e.g., descriptions) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-4-SI-4 (Students will design and conduct different kinds of simple scientific investigations.)
- S-4-SI-5 (communicate (e.g., graph, write) designs, procedures, and results of scientific investigations.)
- S-4-SI-6 (Students will review and ask questions about scientific investigations and explanations of other students.)
- S-4-LS-1 (Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-5-SI-1 (Students will identify questions that can be answered through scientific investigations combined with scientific information.)
- S-5-SI-3 (use evidence (e.g., classifications), logic, and scientific knowledge to develop scientific explanations.)
- S-5-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-5-SI-5 (communicate (e.g., draw, speak) designs, procedures, and results of scientific investigations.)
- S-5-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-6-SI-1 (identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-6-SI-3 (use evidence (e.g., orderings, organizations), logic, and scientific knowledge to develop scientific explanations.)
- S-6-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of questions.)

- S-6-SI-5 (communicate (e.g., speak, write) designs, procedures, and results of scientific investigations.)
- S-6-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-6-LS-1 (Students will investigate how organisms obtain and use resources, grow, reproduce, and maintain stable internal conditions. Examine the regulation of an organism's internal environment.)
- S-6-LS-3 (Students will observe populations and determine the functions (e.g., decomposers, producers, consumers) they serve in an ecosystem.)
- S-7-SI-1(Students will identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-7-SI-3 (Students will use evidence (e.g., measurements), logic, and scientific knowledge to develop scientific explanations.)
- S-7-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of guestions.)
- S-7-SI-5 (Students will communicate (e.g., write) designs, procedures, and results of scientific investigations.)
- S-7-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-7-LS-4 (Students will investigate biological adaptation and extinction.)
- S-8-SI-1 (identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-8-SI-3 (use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- S-8-SI-4 (design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-8-SI-5 (communicate (e.g., write, graph) designs, procedures, and results of scientific investigations.)
- S-8-SI-6 (Students will analyze diversity and adaptations (e.g., changes in structure, behaviors, or physiology.)

#### **Core Content**

#### Science:

- SC-E-SI-1 (ask simple scientific questions that can be investigated through observations combined with scientific information)
- SC-E-SI-3 (use evidence (e.g., observations, data) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- SC-E-SI-4 (design and conduct simple scientific investigations.)
- SC-E-SI-5 (communicate (e.g., draw, graph, write) designs, procedures, observations, and results of scientific investigations.)
- SC-E-SI-6 (review and ask questions about scientific investigations and explanations of other students)
- SC-E-3.1.2 (Organisms have basic needs. For example, animals need air, water, and food; plants need air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met.)
- SC-E-3.1.3 (Each plant or animal has structures that serve different functions in growth, survival, and reproduction. For example, humans have distinct body structures for walking, holding, seeing, and talking.)
- SC-E-3.2.1(Plants and animals have life cycles that include the beginning of life, growth and development, reproduction, and death. The details of a life cycle are different for different organisms.)
- SC-E-3.3.2 (The world has many different environments. Distinct environments support the lives of different types of organisms. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations.)
- SC-E-3.3.3 (All organisms, including humans, cause changes in the environment where they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams built by beavers benefit some aquatic organisms but are detrimental to others).)
- SC-M-SI-1 (refine and refocus questions that can be answered through scientific investigation combined with scientific information)
- SC-M-SI-3 (use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- SC-M-SI-4 (design and conduct scientific investigations.)
- SC-M-SI-5 (communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.)
- SC-M-SI-6 (review and analyze scientific investigations and explanations of other students.)
- SC-M-3.5.2 (Populations of organisms can be categorized by the function they serve in an ecosystem. Plants and some microorganisms are producers because they make their own food. All animals, including humans, are consumers, and obtain their food by eating other organisms. Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem.)